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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,118	05/24/2001	Timothy Simon Bartley	AUS920010231US1	1472

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EXAMINER

MANOSKEY, JOSEPH D

ART UNIT	PAPER NUMBER
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2113

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/864,118

Applicant(s)

BARTLEY, TIMOTHY SIMON

Examiner

Joseph Manoskey

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 43-50 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The computer program product of claims 43-50 is considered to be a program per se is non-statutory subject matter. The examiner suggests to the Applicant to include the limitation "in a computer-readable medium" in a similar manner as in claims 35-42.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang, U.S. Patent 5,748,882.

6. Referring to claim 1, Huang teaches a method for observing whether a process is unable to continue, this is interpreted as detecting a termination of a process within a plurality of processes in a data processing system (See Col. 2, lines 18-23). Huang also teaches the use of a daemon that monitors the process, this is interpreted as establishing, within the plurality of processes, a monitoring policy, wherein the monitoring policy assigns a first process within the plurality of processes to monitor a second process within the plurality of processes (See Col. 4, lines 5-9). Huang discloses observing the process and determining if it is unable to continue, this is interpreted as determining the cause of the execution termination (See Col. 2, lines 18-23). Finally Huang teaches restarting the process, this is interpreted as responsive to a determination that the second process terminated execution in an abnormal manner, attempting to restart the second process by the first process (See Col. 3, lines 61-62).

7. Referring to claim 2, Huang discloses having a communications link, this is interpreted as opening a communications link between the first and second process (See Col. 5, lines 1-2). Huang discloses observing the process and determining if it is unable to continue by polling the process, this is interpreted posting a blocking read by

the first process in order to detect termination of the second process (See Col. 2, lines 18-23, and Col. 4, lines 5-9).

8. Referring to claim 3, Huang teaches the communications link being a one-way link, this is interpreted as the communications link being a FIFO (See Fig. 2).

9. Referring to claim 4, Huang teaches the watch daemon is the process that does the monitoring, this is interpreted as posting a blocking read to the watch FIFO communications link is performed in a single thread of execution (See Col. 2, lines 18-23).

10. Referring to claim 5, Huang discloses the observing the process and determining if it is unable to continue by polling the process, this is interpreted as posts a block operation on the communications link that completes the blocking operation on termination of the second process (See Col. 2, lines 18-23, and Col. 4, lines 5-9).

11. Referring to claim 6, Huang teaches the daemon restarting the process, this is interpreted as the blocking operation is performed in a separate execution thread within the first process in order to allow normal process operation of the second process to continue (See Col. 4, lines 17-20).

12. Referring to claim 7, Huang discloses the daemons forming an adaptive ring, this interpreted as when the second process is determined to terminate in a normal manner having the first process monitor a third process (See Col. 5, lines 8-11). Huang discloses observing the process and determining if it is unable to continue, this is interpreted as monitoring the third process for termination of execution (See Col. 2, lines 18-23).

13. Referring to claim 8, Huang teaches the daemons forming an adaptive ring, this is interpreted as the plurality of processes form a ring of plurality of processes (See Col. 5, lines 8-11).

14. Referring to claim 9, Huang teaches a method for observing whether a process is unable to continue and the watch daemon that can start the process, this is interpreted a process within a plurality of processes containing a first process and a monitoring policy in a data processing system (See Col. 2, lines 18-23 and Col. 5, lines 50-52). The watch daemon can start a process at any time, this is interpreted as a second process requesting to the join the plurality of processes (See Col. 5, lines 50-52). Huang discloses the daemons forming an adaptive ring, this is interpreted as responsive to the second process joining the plurality of processes, selecting the first process to monitor the second process (See Col. 5, lines 8-11). Huang discloses observing the process and determining if it is unable to continue, this is interpreted as monitoring the second process for termination of execution (See Col. 2, lines 18-23).

15. Referring to claim 10, Huang discloses the daemons forming an adaptive ring, this is interpreted as the second process monitoring the process previously monitored by the first process (See Col. 5, lines 8-11).

16. Referring to claim 11, Huang discloses the daemon process starting the second process, this is interpreted as the second process joining the plurality of processes as child of the first processes (Col. 5, lines 50-52).

17. Referring to claim 12, Huang discloses having a communications link, this is interpreted the request is received by an inter-process communications mechanism (See Col. 5, lines 1-2).

18. Referring to claim 13, Huang teaches the daemons forming an adaptive ring, this is interpreted as the plurality of processes form a ring of plurality of processes (See Col. 5, lines 8-11).

19. Referring to claim 14, Huang discloses the use of a status table that is keep consistent when ever any daemon starts a process and discloses having a communications link, this is interpreted as locking a state file in a join communications link and blocking any other processes attempting to simultaneously join (See Col. 4, lines 45-54, Col. 5, lines 1-2).

20. Referring to claim 15, Huang teaches the watch daemon is the process that does the monitoring, this is interpreted as posting a blocking read to the watch FIFO communications link is performed in a single thread of execution (See Col. 2, lines 18-23).

21. Referring to claim 16, Huang discloses the use of a status table that is keep consistent when ever any daemon starts a process, this is interpreted as blocking any other process attempting to simultaneously join with a file lock (See Col. 4, lines 45-54, Col. 5, lines 1-2).

22. Referring to claim 17, Huang teaches a data processing system for observing whether a process is unable to continue, this is interpreted as detecting a termination of a process within a plurality of processes in a data processing system (See Col. 2, lines 13-23). Huang also teaches the use of a daemon that monitors the process, this is interpreted as establishing, within the plurality of processes, a monitoring policy, wherein the monitoring policy assigns a first process within the plurality of processes to monitor a second process within the plurality of processes (See Col. 4, lines 5-9). Huang discloses observing the process and determining if it is unable to continue, this is interpreted as determining the cause of the execution termination (See Col. 2, lines 18-23). Finally Huang teaches restarting the process, this is interpreted as responsive to a

determination that the second process terminated execution in an abnormal manner, attempting to restart the second process by the first process (See Col. 3, lines 61-62).

23. Referring to claim 18, Huang discloses having a communications link, this is interpreted as opening a communications link between the first and second process (See Col. 5, lines 1-2). Huang discloses observing the process and determining if it is unable to continue by polling the process, this is interpreted posting a blocking read by the first process in order to detect termination of the second process (See Col. 2, lines 18-23, and Col. 4, lines 5-9).

24. Referring to claim 19, Huang teaches the communications link being a one-way link, this is interpreted as the communications link being a FIFO (See Fig. 2).

25. Referring to claim 20, Huang teaches the watch daemon is the process that does the monitoring, this is interpreted as posting a blocking read to the watch FIFO communications link is performed in a single thread of execution (See Col. 2, lines 18-23).

26. Referring to claim 21, Huang discloses the observing the process and determining if it is unable to continue by polling the process, this is interpreted as posts a block operation on the communications link that completes the blocking operation on termination of the second process (See Col. 2, lines 18-23, and Col. 4, lines 5-9).

27. Referring to claim 22, Huang teaches the daemon restarting the process, this is interpreted as the blocking operation is performed in a separate execution thread within the first process in order to allow normal process operation of the second process to continue (See Col. 4, lines 17-20).

28. Referring to claim 23, Huang discloses the daemons forming an adaptive ring, this interpreted as when the second process is determined to terminate in a normal manner having the first process monitor a third process (See Col. 5, lines 8-11). Huang discloses observing the process and determining if it is unable to continue, this is interpreted as monitoring the third process for termination of execution (See Col. 2, lines 18-23).

29. Referring to claim 24, Huang teaches the daemons forming an adaptive ring, this is interpreted as the plurality of processes form a ring of plurality of processes (See Col. 5, lines 8-11).

30. Referring to claim 25, Huang teaches a data processing system for observing whether a process is unable to continue and the watch daemon that can start the process, this is interpreted a process within a plurality of processes containing a first process and a monitoring policy in a data processing system (See Col. 2, lines 13-23 and Col. 5, lines 50-52). The watch daemon can start a process at any time, this is

interpreted as a second process requesting to join the plurality of processes (See Col. 5, lines 50-52). Huang discloses the daemons forming an adaptive ring, this is interpreted as responsive to the second process joining the plurality of processes, selecting the first process to monitor the second process (See Col. 5, lines 8-11). Huang discloses observing the process and determining if it is unable to continue, this is interpreted as monitoring the second process for termination of execution (See Col. 2, lines 18-23).

31. Referring to claim 26, Huang discloses the daemons forming an adaptive ring, this is interpreted as the second process monitoring the process previously monitored by the first process (See Col. 5, lines 8-11).

32. Referring to claim 27, Huang discloses the daemon process starting the second process, this is interpreted as the second process joining the plurality of processes as child of the first processes (Col. 5, lines 50-52).

33. Referring to claim 28, Huang discloses having a communications link, this is interpreted the request is received by an inter-process communications mechanism (See Col. 5, lines 1-2).

34. Referring to claim 29, Huang teaches the daemons forming an adaptive ring, this is interpreted as the plurality of processes form a ring of plurality of processes (See Col. 5, lines 8-11).

35. Referring to claim 30, Huang discloses the use of a status table that is keep consistent when ever any daemon starts a process and discloses having a communications link, this is interpreted as locking a state file in a join communications link and blocking any other processes attempting to simultaneously join (See Col. 4, lines 45-54, Col. 5, lines 1-2).

36. Referring to claim 31, Huang teaches the watch daemon is the process that does the monitoring, this is interpreted as posting a blocking read to the watch FIFO communications link is performed in a single thread of execution (See Col. 2, lines 18-23).

37. Referring to claim 32, Huang discloses the use of a status table that is keep consistent when ever any daemon starts a process, this is interpreted as blocking any other process attempting to simultaneously join with a file lock (See Col. 4, lines 45-54, Col. 5, lines 1-2).

38. Referring to claim 33, Huang teaches a data processing system for observing whether a process is unable to continue, this is interpreted as detecting a termination of

a process within a plurality of processes in a data processing system (See Col. 2, lines 13-23). The processing system includes nodes that have a processor, memory, and communications link, this interpreted as bus system, memory containing a set of instructions and a first and second process (See Col. 4, line 66 to Col. 5, line 2). Huang also teaches the use of a daemon that monitors the process, this is interpreted as establishing, within the plurality of processes, a monitoring policy, wherein the monitoring policy assigns a first process within the plurality of processes to monitor a second process within the plurality of processes (See Col. 4, lines 5-9). Huang discloses observing the process and determining if it is unable to continue, this is interpreted as determining the cause of the execution termination (See Col. 2, lines 18-23). Finally Huang teaches restarting the process, this is interpreted as responsive to a determination that the second process terminated execution in an abnormal manner, attempting to restart the second process by the first process (See Col. 3, lines 61-62).

39. Referring to claim 34, Huang teaches a data processing system for observing whether a process is unable to continue and the watch daemon that can start the process, this is interpreted a process within a plurality of processes containing a first process and a monitoring policy in a data processing system (See Col. 2, lines 13-23 and Col. 5, lines 50-52). The processing system includes nodes that have a processor, memory, and communications link, this interpreted as bus system, memory containing a set of instructions and a first and second process (See Col. 4, line 66 to Col. 5, line 2). The watch daemon can start a process at any time, this is interpreted as a second

process requesting to the join the plurality of processes (See Col. 5, lines 50-52).

Huang discloses the daemons forming an adaptive ring, this is interpreted as responsive to the second process joining the plurality of processes, selecting the first process to monitor the second process (See Col. 5, lines 8-11). Huang discloses observing the process and determining if it is unable to continue, this is interpreted as monitoring the second process for termination of execution (See Col. 2, lines 18-23).

40. Referring to claim 35, Huang teaches a program product on computer readable medium for observing whether a process is unable to continue, this is interpreted as detecting a termination of a process within a plurality of processes in a data processing system (See Col. 2, lines 18-23 and Col. 3, lines 13-24). Huang also teaches the use of a daemon that monitors the process, this is interpreted as establishing, within the plurality of processes, a monitoring policy, wherein the monitoring policy assigns a first process within the plurality of processes to monitor a second process within the plurality of processes (See Col. 4, lines 5-9). Huang discloses observing the process and determining if it is unable to continue, this is interpreted as determining the cause of the execution termination (See Col. 2, lines 18-23). Finally Huang teaches restarting the process, this is interpreted as responsive to a determination that the second process terminated execution in an abnormal manner, attempting to restart the second process by the first process (See Col. 3, lines 61-62).

41. Referring to claim 36, Huang discloses having a communications link, this is interpreted as opening a communications link between the first and second process (See Col. 5, lines 1-2). Huang discloses observing the process and determining if it is unable to continue by polling the process, this is interpreted as posting a blocking read by the first process in order to detect termination of the second process (See Col. 2, lines 18-23, and Col. 4, lines 5-9).

42. Referring to claim 37, Huang teaches the communications link being a one-way link, this is interpreted as the communications link being a FIFO (See Fig. 2).

43. Referring to claim 38, Huang teaches the watch daemon is the process that does the monitoring, this is interpreted as posting a blocking read to the watch FIFO communications link is performed in a single thread of execution (See Col. 2, lines 18-23).

44. Referring to claim 39, Huang discloses the observing the process and determining if it is unable to continue by polling the process, this is interpreted as posts a block operation on the communications link that completes the blocking operation on termination of the second process (See Col. 2, lines 18-23, and Col. 4, lines 5-9).

45. Referring to claim 40, Huang teaches the daemon restarting the process, this is interpreted as the blocking operation is performed in a separate execution thread within

the first process in order to allow normal process operation of the second process to continue (See Col. 4, lines 17-20).

46. Referring to claim 41, Huang discloses the daemons forming an adaptive ring, this interpreted as when the second process is determined to terminate in a normal manner having the first process monitor a third process (See Col. 5, lines 8-11). Huang discloses observing the process and determining if it is unable to continue, this is interpreted as monitoring the third process for termination of execution (See Col. 2, lines 18-23).

47. Referring to claim 42, Huang teaches the daemons forming an adaptive ring, this is interpreted as the plurality of processes form a ring of plurality of processes (See Col. 5, lines 8-11).

48. Referring to claim 43, Huang teaches a program product in computer readable medium for observing whether a process is unable to continue and the watch daemon that can start the process, this is interpreted a process within a plurality of processes containing a first process and a monitoring policy in a data processing system (See Col. 2, lines 18-23, Col. 3, lines 13-24 and Col. 5, lines 50-52). The watch daemon can start a process at any time, this is interpreted as a second process requesting to the join the plurality of processes (See Col. 5, lines 50-52). Huang discloses the daemons forming an adaptive ring, this is interpreted as responsive to the second process joining the

plurality of processes, selecting the first process to monitor the second process (See Col. 5, lines 8-11). Huang discloses observing the process and determining if it is unable to continue, this is interpreted as monitoring the second process for termination of execution (See Col. 2, lines 18-23).

49. Referring to claim 44, Huang discloses the daemons forming an adaptive ring, this is interpreted as the second process monitoring the process previously monitored by the first process (See Col. 5, lines 8-11).

50. Referring to claim 45, Huang discloses the daemon process starting the second process, this is interpreted as the second process joining the plurality of processes as child of the first processes (Col. 5, lines 50-52).

51. Referring to claim 46, Huang discloses having a communications link, this is interpreted the request is received by an inter-process communications mechanism (See Col. 5, lines 1-2).

52. Referring to claim 47, Huang teaches the daemons forming an adaptive ring, this is interpreted as the plurality of processes form a ring of plurality of processes (See Col. 5, lines 8-11).

53. Referring to claim 48, Huang discloses the use of a status table that is keep consistent when ever any daemon starts a process and discloses having a communications link, this is interpreted as locking a state file in a join communications link and blocking any other processes attempting to simultaneously join (See Col. 4, lines 45-54, Col. 5, lines 1-2).

54. Referring to claim 49, Huang teaches the watch daemon is the process that does the monitoring, this is interpreted as posting a blocking read to the watch FIFO communications link is performed in a single thread of execution (See Col. 2, lines 18-23).

55. Referring to claim 50, Huang discloses the use of a status table that is keep consistent when ever any daemon starts a process, this is interpreted as blocking any other process attempting to simultaneously join with a file lock (See Col. 4, lines 45-54, Col. 5, lines 1-2).

Conclusion

56. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following are closely related restarting systems.

U.S. Patent 6,745,350 to Cline et al.

U.S. Patent Application Pub. 2002/0152425 to Chaiken et al.


U.S. Patent 6,687,847 to Aguilera et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Manoskey whose telephone number is (703) 308-5466. After approximately October 15, the examiner can be reached at the new Alexandria telephone number, (571) 272-3648. The examiner can normally be reached on Mon.-Fri. (8am to 4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDM
September 18, 2004


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